

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-2. (canceled).

3. (currently amended): A method for transmitting Ethernet frames, said method comprising:

determining a transmission protocol from a header of the Ethernet frames;

assigning a pair of object identifiers to a pair of nodes for facilitating communication between the nodes using the Ethernet frames; and

managing a finite number of the object identifiers,

wherein the transmission protocol is not a standard Ethernet protocol~~The method as claimed in claim 2, and~~

wherein the transmission protocol conforms to the CAN (ISO 11898) protocol.

4. (currently amended): A method for transmitting Ethernet frames, said method comprising:

determining a transmission protocol from a header of the Ethernet frames;

assigning a pair of object identifiers to a pair of nodes for facilitating communication between the nodes using the Ethernet frames;

managing a finite number of the object identifiers; and

~~A method as claimed in claim 1, further comprising:~~ requesting a return of assigned object identifiers when the number of unused object identifiers falls below a predetermined level.

5. (currently amended): A method for transmitting Ethernet frames, said method comprising:

determining a transmission protocol from a header of the Ethernet frames;

assigning a pair of object identifiers to a pair of nodes for facilitating communication between the nodes using the Ethernet frames;

managing a finite number of the object identifiers;

~~A method as claimed in claim 1, further comprising:~~ providing a subscriber node that sends a registration request; and

assigning a private unique object identifier to the subscriber node.

6. (currently amended): A method as claimed in claim 5~~4~~, further comprising:
transmitting control messages to one or more subscriber nodes, for which each of a plurality of stations is continuously receive-ready.

7. (canceled).

8. (new): A method for transmitting Ethernet frames through sequences of data packets of a transmission protocol, with the information relevant for the transmission protocol being extracted from a header of the Ethernet frame, the method comprising:

administering by a central entity (CAN Object Identifier Server) a number of usable CAN (Controller Area Network) object identifiers; and

assigning by the central entity (CAN Object Identifier Server) to each pair of communicating nodes between which Ethernet frames will be transmitted a pair of CAN (Controller Area Network) object identifiers.

9. (new): The method according to claim 8, wherein the central entity (CAN Object Identifier Server) requests return of the assigned CAN object identifiers as supply of free CAN object identifiers becomes scarce.

10. (new): The method according to claim 9, wherein a subscriber node sends a registration request to the central entity (CAN Object Identifier Server) and the central entity (CAN Object Identifier Server) allocates a private unique CAN object identifier to the subscriber node.

11. (new): The method according to claim 9, wherein the central entity (CAN Object Identifier Server) uses a code for which each of a plurality of stations is continuously receive-ready, transferring control messages to at least one subscriber node.

12. (new): The method according to claim 8, wherein a subscriber node sends a registration request to the central entity (CAN Object Identifier Server) and the central entity (CAN Object Identifier Server) allocates a private unique CAN object identifier to the subscriber node.

13. (new): The method according to claim 8, wherein the central entity (CAN Object Identifier Server) uses a code for which each of a plurality of stations is continuously receive-ready, transferring control messages to at least one subscriber node.